

REMARKS

Applicant had filed a Notice of Appeal and a Request for Pre-Appeal Review. In response, the Board remanded the case back to the Examiner. Now, an Office Action has issued which is almost identical to the one which prompted Applicant to file the Notice of Appeal...

Despite the fact that Applicant believes that the claims are patentable over the cited references, without need for an additional amendment, the claims of the present application have been further amended in response to the Examiner's Office Action to further distinguish the claimed invention from that which is disclosed in the cited references and to expedite prosecution. If the Examiner decides to issue an Advisory Action, Applicant respectfully requests that the Examiner be specific in his comments, to give Applicant some guidance as to whether to respond with a Request for Continued Examination (RCE) or to file another Notice of Appeal and Request for Pre-Appeal Review.

In the Office Action, the Examiner maintains his rejection of claims 15-26 under 35 U.S.C. § 103(a) as being unpatentable over United States Patent No. 5,841,709 (McClure) in view of United States Patent No. 6,999,357 (Tanishima).

In rejecting the claims, the Examiner pointed out that McClure does not disclose adding access to additional redundant memory which is not required for the repair, and after re-testing the functional memory and adding access to additional redundant memory, testing the additional redundant memory, but asserts that this is disclosed by Tanishima and that it would have been obvious to modify McClure, using Tanishima, to arrive at the present invention.

Independent claim 15 specifically claims that the step of adding access to additional redundant memory which is not required for the repair occurs **after repairing the functional memory by adding access to redundant elements and after re-testing the functional memory which has been repaired**, and the step of testing the additional redundant memory which has been added which was not required for the repair occurs **after repairing and re-testing the functional memory and adding access to the additional redundant memory which has been added which was not required for the repair**. Claim 21 is similar but is directed to a mode for testing memory.

Not only does McClure not disclose or suggest providing this, but Tanishima also does not disclose or suggest providing this. While Tanishima teaches, at col. 6, lines 33-36, “to replace the failed memory cell array with the redundant memory cell array” and to thereafter perform tests, the redundant memory cell array is required for the repair.

At col. 8, lines 5-8, Tanishima teaches the ability “to perform the testing of the redundant cell array during the testing step without actual replacement with the redundant memory cell array.” As such, the redundant memory cell array is required for the repair, it just may not be used in the end. In Tanishima, this testing is performed before making the repair. Tanishima does not teach adding access to additional redundant memory cell arrays after the functional memory is already repaired and re-tested. In Tanishima, the functional memory is not tested, repaired and re-tested before adding access to additional redundant memory, where the additional redundant memory is not required for the repair.

Applicant submits that what is being claimed in claims 15 and 21 is neither disclosed nor suggested by the cited references, and Applicant respectfully submits that claims 15 and 21, and those claims which depend therefrom, are allowable.

In the most recent Office Action, the Examiner cites McClure and Tanishima, asserts that “the only difference is that the method of Tanishima is not performed after that of McClure”, and cites KSR in rejecting the claims based on obviousness. Applicant respectfully asserts that the differences between the present invention and that which is disclosed in McClure and Tanishima is not merely the order of the steps. The methods are completely different from each other. In McClure and Tanishima, once the functional memory is repaired, there is no adding of access to additional redundant memory, and there is no testing of this additional redundant memory which has been added. Neither McClure nor Tanishima suggest performing the method as claimed. Applicant respectfully submits that the motivation cited by the Examiner is not legally sufficient and does not support an obviousness rejection. Additionally, even if the references are combinable as suggested by the Examiner, one does not arrive at the present invention as claimed. Applicant respectfully submits that the Examiner is overly aggressively applying KSR, is over simplifying the invention, and is engaging in hindsight. As early as 1891, the United States Supreme Court held that:

Knowledge after the event is always easy, and problems once solved present no difficulties, indeed, may be represented as never having had any, and expert witnesses may be brought forward to show that the new thing which seemed to have eluded the search of the world was always ready at hand and easy to be seen by a merely skillful attention. But the law has other tests of the invention than subtle conjectures of what might have been seen and yet was not. It regards a change as evidence of

novelty, the acceptance and utility of change as further evidence, even as demonstration . . . Nor does it detract from its merit that it is the result of experiment and not the instant and perfect product of inventive power. A patentee may be baldly empirical, seeing nothing beyond his experiments and the result; yet if he has added a new and valuable article to the world's utilities, he is entitled to the rank and protection of an inventor . . . It is certainly not necessary that he understand or be able to state the scientific principles underlying his invention, and it is immaterial whether he can stand a successful examination as to the speculative ideas involved.

Diamond Rubber Co. v. Consolidated Rubber Tile Co., 220 U.S. 428 , 435-36.

As discussed above, despite the fact that Applicant believes that the claims are patentable over the cited references, without need for an additional amendment, the claims of the present application have been further amended in response to the Examiner's Office Action to further distinguish the claimed invention from that which is disclosed in the cited references and to expedite prosecution. Specifically, independent claim 15 now specifically claims the step of adding access to additional redundant memory **without replacing failed memory** wherein the additional redundant memory is not required for the repair. Independent claim 21 has been similarly amended but is directed to a mode for testing memory.

In contrast, Tanishima discloses **replacing a failed memory cell array with a redundant cell array** (see col. 6, lines 33-34). Neither McClure nor Tanishima discloses, either alone or in combination, testing functional memory, repairing the functional memory by adding access to redundant elements, re-testing the functional memory which has been repaired, after repairing the functional memory adding access to additional redundant memory **without replacing failed memory**, and after repairing and re-testing the functional memory and adding access to

the additional redundant memory which has been added which was not required for the repair,
testing the additional redundant memory which has been added which was not required for the
repair.

Applicant submits that what is now being claimed in claims 15 and 21 is neither disclosed
nor suggested by the cited references, and respectfully submits that claims 15 and 21, and those
claims which depend therefrom, are allowable.

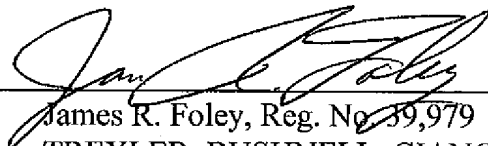
In view of the above amendments and remarks, Applicant respectfully requests that the
present application be passed to issuance.

Should the present claims not be deemed adequate to effectively define the patentable
subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to
discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

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By: _____


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